

INSECTS COLLECTED IN THE DUNDAS MARSH,
HAMILTON, ONTARIO, 1947-48¹BY W. W. JUDD²

INTRODUCTION

In a previous paper (Judd, 1949) the writer reported upon collections of insects made in the Dundas Marsh during the summers of 1946 and 1947 and upon studies of the times of appearance of adults of aquatic insects emerging from the waters of the marsh in 1947. During 1948 collections of insects on the marsh were continued and they are reported upon herewith, together with additional records from 1947. Some of the insects were collected by sweeping the vegetation around the borders of the marsh, some were collected from leaves and flowers of aquatic plants and some were reached by canoe, being swept from their resting places on the broad leaves of water lilies (*Nymphaea odorata* Ait. and *Nuphar advena* Ait.) and the extensive mats of duckweed (*Lemna minor* L. and *Spirodela polyrhiza* (L.) Scheld.) which formed in quiet stretches of the marsh. As reported in the previous paper, insects emerging from the water during 1947 were trapped in five cages set out at various locations. Cage 1 was about twenty feet from shore in a growth of cat-tail, *Typha latifolia* L., cage 2 was set out over a growth of submerged plants among which the bladderwort, *Utricularia vulgaris* var. *americana* Gray predominated, cages 3 and 5 were placed over submerged plants, mainly coontail, *Ceratophyllum demersum* L. and cage 4 was over a growth of the white water lily *Nymphaea odorata* Ait. A fuller account of the plants occurring in the cages is given in the previous paper.

INSECTS COLLECTED

PLECOPTERA

Nemouridæ

Nemoura vallicularia Wu

Thirteen stoneflies were captured in flight or on the trunks of trees about an inlet of the marsh on April 17, 1948. Of these,

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two males and one female are deposited in the collection of Dr. W. E. Ricker, Indiana University.

NEUROPTERA

Hemerobiidæ

Micromus posticus (Walker)

One specimen captured in flight along border of marsh, May 13, 1947.

Hemerobius humulinus L.

Three specimens captured in flight along border of marsh, April 29, May 15, July 28, 1947.

COLEOPTERA

Chrysomelidæ

Donacia subtilis Kunze

Larvæ and cocoons of the beetle were found on a plant of the bur-reed, *Sparganium eurycarpum* Englm. growing in two feet of water about fifty feet from shore. Seven brown cocoons were stuck to the leaves, the ones highest up on the plant being about two inches below the surface of the water and the others ranging downward to the tops of the roots. Four of the cocoons contained white pupæ and the other three contained fully formed adults. Seven larvæ were found with their ends stuck into the tissues of the plant, below the surface of the water, some being attached to the outside of the leaves and others being lodged between the bases of the leaves. Hoffman (1939) reports the occurrence of larvæ and eggs on various species of *Sparganium* and other aquatic plants.

HOMOPTERA

Aphidæ

Rhopalosiphum nymphaeæ L.

Specimens were collected on November 5 and 8, 1948 from plants of *Typha latifolia* L. close to the edge of the marsh. These were the winged sexes of this species which was previously reported from leaves of the water lily *Nymphaea odorata* Ait. (Judd, 1949). They were found among the bases of the dead leaves of the cat-tail and were interspersed with numerous cast-

off skins. Although the leaves were frozen together and the bases of the plants were surrounded with frost the insects moved sluggishly when removed from the leaves.

DIPTERA

Orthorrhapha

Nemocera

Trichoceridæ

Trichocera garretti Alex.

A single specimen was captured in flight on March 14, 1948 when the marsh was still frozen over and covered with snow and the flowers of skunk cabbage were in bloom and producing pollen.

Tipulidæ

Erioptera (Symplecta) cana (Walker)

One specimen was trapped in cage 1, July 31, 1947 when the water depth was 32 inches, and another was captured in flight April 15, 1948.

Mycetophilidæ

Mycetophila punctata Meigen

Two flies were swept from vegetation at the border of the marsh, May 13, 1947.

Brachycera

Stratiomyidæ

Odontomyia vertebrata Say

Five adults of this fly emerged in the cages during 1947. Four of these appeared in cage 1: July 17 (water depth—34 inches), Aug. 1 (water depth—33 inches), Aug. 4 (water depth—33 inches) and Aug. 5 (water depth—33 inches). The fifth appeared in cage 5 on July 29 (water depth—55 inches). These records indicate that the adults emerge in the latter half of July and the first part of August and that the larvæ inhabit the shallower weed-choked waters as at cage 1, but can be found in deeper, more open water as at cage 5.

Tabanidæ

Chrysops aberrans Phil.

One fly was captured on Aug. 3, 1947 and three were captured on July 16, 1948. They were collected while settling on the skin of workers on the marsh.

Dolichopidæ

Sympycnus lineatus Lw.

Seven adults were swept from vegetation around the marsh during 1947: May 5 (1), May 6 (1), May 13 (4), Aug. 11 (1).

Pelastoneurus vagans Lw.

One specimen was trapped in cage 4 (water depth—58 inches), July 17, 1947.

Cyclorrhapha

Syrphidæ

Platycheirus quadratus Say

Two adults were swept from vegetation, May 22, 1947.

Drosophilidæ

Chymomyza amæna (Lw.)

Two adults were swept from vegetation, May 13, 1947.

Chloropidæ

Elachiptera bilineata Ad.

Flies were swept from vegetation on April 26 (2), April 29 (3), April 30 (5), May 21 (1), 1947.

Ephydridæ

Discocerina obscurella (Fln.)

Three adults were swept from vegetation: June 28 (2), and Aug. 11 (1), 1947.

Dichæta caudata (Fln.)

Three adults were swept from vegetation: April 28 (2), and May 6 (1), 1947.

Pelina truncatus Lw.

Four adults were swept from vegetation: April 24, April 26, April 29 (2) and one was collected from leaves of the water lily, *Nymphæa odorata* Ait., June 25, 1947.

Sectacera atrovirens (Lw.)

Six flies were swept from vegetation Aug. 11, 1947.

Hydrellia griseola var. *scapularis* (Lw.)

Five flies were swept from vegetation on May 6 (1) and June 25 (4), and one from lily pads, Aug. 11, 1947.

Diopsidæ

Sphyracephala brevicornis Say

One adult was swept from a growth of skunk cabbage, *Symplocarpus foetidus* (L.) Nutt, April 30, 1947 and four were captured in flight about an inlet of the marsh on March 21, 1948.

Borboridæ

Leptocera (Scotophilella) mirabilis (Coll.)

Two flies were swept from leaves of the lily, *Nymphæa odorata* Ait., July 25, 1947. One specimen is deposited in the Canadian National Collection, Ottawa.

Leptocera (Opacifrons) wheeleri Spul.

One fly was swept from vegetation June 28, 1947. The specimen is deposited in the Canadian National Collection, Ottawa.

Tetanoceridæ

Sepedon fuscipennis Lw.

Adults of this species appeared in large numbers in the vegetation around the border of the marsh in the spring of 1947 and the following specimens were captured: April 24 (4), April 26 (4), April 28 (2), April 29 (1). One was captured later on Aug. 11, 1947. One appeared in cage 1 on Sept. 11, 1947 (water depth—26 inches, and one in cage 5 on July 19, 1947 (water depth—55 inches). Pupæ have been reported by Johannsen (1935) from the margin of a pond.

Elgiva rufa (Pz.)

This species occurred in company with *Sepedon fuscipennis* in the vegetation about the marsh in 1947, the following specimens being captured: Apr. 6 (7), April 28 (12), April 29 (5), April 30 (6), May 5 (2), May 6 (3). One specimen emerged in cage 5, Oct. 25, 1947 (water depth—36 inches).

Melina schœnherrri Flin.

Three flies were swept from vegetation, April 28 (2), May 5 (1), 1947. One specimen is deposited in the Canadian National Collection.

Cordyluridæ

Pyropea furcata Say

Adults were found in company with *Sepedon fuscipennis* and

Elgiva rufa in vegetation about the Marsh in 1947, the following specimens being captured: April 26 (2), April 28 (5), April 30 (2).

Muscidæ

Lispe albitarsus Stn.

Adults appeared in cages during 1947 as follows: cage 3—July 17 (1) (water depth—51 inches); cage 4—July 16 (1) (water depth—59 inches), July 17 (1) (water depth—58 inches), July 22 (1) (water depth—57 inches); cage 5—July 5 (1) (water depth—55 inches), July 15 (1) (water depth—57 inches). These records indicate that this species emerges during July from deeper waters away from the shore.

Scopeuma stercoraria (L.)

One adult was captured from vegetation, May 22, 1947.

Helina rufitibia Stn.

One adult was captured on vegetation, April 26, 1947.

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BOOK NOTICE

The Life of William T. Davis. By Mabel Abbott. Cornell University Press, Ithaca, N. Y. 1949. 9½ × 6 inches. xv + 321 p. 26 illus. \$3.50.

This is a book to be read, rather than written about. Following an appreciative introduction by Edwin Way Teale, Miss Abbott, in 20 chapters, presents a sincere, full length portrait of William T. Davis. Most entomologists are unfortunate in their biographers, if they have any at all and only rarely is the human side of the subject presented. But this is not true of Miss Abbott's book which begins with the background and boyhood of Mr. Davis and continues through his long life. Included therein are chapters on his youthful reading habits, his numerous friendships and correspondents, his helpfulness to many persons, his continuous interest in cicadas and the natural history of Staten Island, his travels, his financial worries, his diet, of which he had to be careful, and his long active interest in the Staten Island Institute of Arts and Sciences, and other cultural bodies of the Island.

In her account Miss Abbott has included many extracts from Mr. Davis' "Natural History Notes" a manuscript record, which he kept for 56 years, of his observations, thoughts, and bits of reflections, all indicating his philosophy and attitude toward life. Although Mr. Davis, a lifelong resident of Staten Island, was